

Access DB# 139394

SEARCH REQUEST FORM

Scientific and Technical Information Center

Requester's Full Name: Amanda Wake Examiner #: 75463 Date: 12/2/04
Art Unit: 1752 Phone Number: 202-1337 Serial Number: 101788963
Mail Box and Bldg/Room Location: 2EM 9064 Results Format Preferred (circle) PAPER DISK E-MAIL

If more than one search is submitted, please prioritize searches in order of need.

Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc, if known. Please attach a copy of the cover sheet, pertinent claims, and abstract.

Title of Invention: Bio Sheet Attached

Inventors (please provide full names): _____

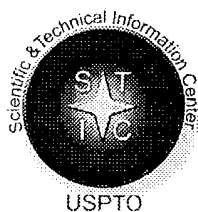
Earliest Priority Filing Date: _____

**For Sequence Searches Only* Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.*

Please search for compd of formula I. Thank you.

STAFF USE ONLY

	Type of Search	Vendors and cost where applicable
Searcher: <u>Usher Shoerster</u>	NA Sequence (#) _____	STN <u># 518.80</u>
Searcher Phone #: _____	AA Sequence (#) _____	Dialog _____
Searcher Location: _____	Structure (#) _____	Questel/Orbit _____
Date Searcher Picked Up: <u>12/10/04</u>	Bibliographic _____	Dr.Link _____
Date Completed: <u>12/10/04</u>	Litigation _____	Lexis/Nexis _____
Searcher Prep & Review Time: <u>40</u>	Fulltext _____	Sequence Systems _____
Clerical Prep Time: _____	Patent Family _____	WWW/Internet _____
Online Time: <u>200</u>	Other _____	Other (specify) _____



STIC Search Report

EIC 1700

STIC Database Tracking Number: 139374

TO: Amanda Walke
Location: REM 9D64
Art Unit : 1752
December 13, 2004

Case Serial Number: 10/788963

From: Usha Shrestha
Location: EIC 1700
REMSSEN 4B28
Phone: 571/272-3519
usha.shrestha@uspto.gov

Search Notes



STIC Search Results Feedback Form

EIC17000

Questions about the scope or the results of the search? Contact *the EIC searcher* or contact:

Kathleen Fuller, EIC 1700 Team Leader
571/272-2505 REMSEN 4B28

Voluntary Results Feedback Form

➤ I am an examiner in Workgroup: Example: 1713

➤ Relevant prior art **found**, search results used as follows:

- ☐ 102 rejection
- ☐ 103 rejection
- ☐ Cited as being of interest.
- ☐ Helped examiner better understand the invention.
- ☐ Helped examiner better understand the state of the art in their technology.

Types of relevant prior art found:

- ☐ Foreign Patent(s)
- ☐ Non-Patent Literature
(journal articles, conference proceedings, new product announcements etc.)

➤ Relevant prior art **not found**:

- ☐ Results verified the lack of relevant prior art (helped determine patentability).
- ☐ Results were not useful in determining patentability or understanding the invention.

Comments:

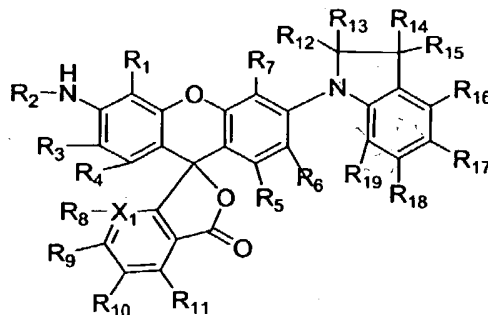
Drop off or send completed forms to EIC1700 REMSEN 4B28



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WHAT IS CLAIMED IS:

1. A compound represented by the formula



(I)

wherein:

R₁, R₃, R₄, R₅, R₆ and R₇ are each independently selected from the group consisting of hydrogen, alkyl, substituted alkyl, alkenyl, substituted alkenyl, alkynyl, substituted, alkynyl, heterocycloalkyl, substituted heterocycloalkyl, substituted carbonyl, acylamino, halogen, nitro, nitrilo, sulfonyl, aryl, substituted aryl, heteroaryl, substituted heteroaryl, oxygen, substituted oxygen, nitrogen, substituted nitrogen, sulfur and substituted sulfur;

R₂ is selected from the group consisting of hydrogen, alkyl, substituted alkyl, alkenyl, substituted alkenyl, alkynyl, substituted alkynyl, heterocycloalkyl, substituted heterocycloalkyl, substituted carbonyl, sulfonyl, aryl, substituted aryl, heteroaryl,

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substituted heteroaryl, substituted oxygen, substituted nitrogen and substituted sulfur;

R₈ is absent or selected from the group consisting of hydrogen, alkyl, substituted alkyl, alkenyl, substituted alkenyl, alkynyl, substituted alkynyl, heterocycloalkyl, substituted heterocycloalkyl, substituted carbonyl, acylamino, halogen, nitro, nitrilo, sulfonyl, aryl, substituted aryl, heteroaryl, substituted heteroaryl, oxygen, substituted oxygen, nitrogen, substituted nitrogen, sulfur and substituted sulfur;

R₉, R₁₀ and R₁₁ are independently selected from the group consisting of hydrogen, alkyl, substituted alkyl, alkenyl, substituted alkenyl, alkynyl, substituted alkynyl, heterocycloalkyl, substituted heterocycloalkyl, substituted carbonyl, acylamino, halogen, nitro, nitrilo, sulfonyl, aryl, substituted aryl, heteroaryl, substituted heteroaryl, oxygen, substituted oxygen, nitrogen, substituted nitrogen, sulfur and substituted sulfur;

R₁₂, R₁₃, R₁₄ and R₁₅ are independently selected from the group consisting of hydrogen, alkyl, substituted alkyl, alkenyl, substituted alkenyl, alkynyl, substituted alkynyl, heterocycloalkyl, substituted heterocycloalkyl, substituted carbonyl, acylamino, aryl, substituted aryl, heteroaryl, and substituted heteroaryl;

R₁₆, R₁₇, R₁₈ and R₁₉ are independently selected from the group consisting of hydrogen, alkyl, substituted alkyl, alkenyl, substituted alkenyl,

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alkynyl, substituted alkynyl, heterocycloalkyl, substituted heterocycloalkyl, substituted carbonyl, acylamino, halogen, nitro, nitrilo, sulfonyl, aryl, substituted aryl, heteroaryl, substituted heteroaryl, oxygen, substituted oxygen, nitrogen, substituted nitrogen, sulfur and substituted sulfur; and

X₁ is carbon or nitrogen.

2. A compound according to Claim 1 wherein R₈, R₉, R₁₀ and R₁₁ are halogen, R₁, R₂, R₃, R₄, R₅, R₆, R₇, R₁₂, R₁₃, R₁₄, R₁₅, R₁₆, R₁₇, R₁₈ and R₁₉ are as defined in Claim 1 and X₁ is carbon.

3. The imaging member comprising a first image-forming layer including a compound according to Claim 1, said compound being in the crystalline form.

4. The imaging member as defined in Claim 3 and further including a substrate and at least a second color-forming layer, said second color-forming layer being capable of forming a color different from that formed by said first color-forming layer.

5. The imaging member as defined in Claim 4 and further including a third color-forming layer, said third color-forming layer being capable of forming a color different from those formed by said first and second color-forming layers.

6. The imaging member as defined in Claim 5 wherein said color-forming layers form magenta, cyan and yellow color, respectively.

7. The imaging method comprising
(a) providing an imaging member as defined in Claim 3; and
(b) converting at least a portion of said compound to the liquid form in an imagewise pattern whereby an image is formed.

8. The method as defined in Claim 7 wherein step (b) comprises applying an imagewise pattern of thermal energy to said imaging member whereby at least a portion of said compound is converted to the liquid form and an image is formed.

9. The thermal imaging method as defined in Claim 8 wherein said imaging member further includes a substrate and at least a second color-forming layer, said second color-forming layer being capable of forming a color different from that formed by said first color-forming layer.

10. The imaging method as defined in Claim 8 wherein said imaging member further includes a third color-forming layer, said third color-forming layer being capable of forming a color different from those formed by said first and second color-forming layers.

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11. The imaging method as defined in Claim 10 wherein said color-forming layers form magenta, cyan and yellow color, respectively.

10/788963 Examiner: WALKER, AMANDA GAU: 1752
Classification: 430/357.000 Inventor: CHEON, KAP-SOO, et al
Status: 30 - DOCKETED NEW CASE - READY FOR EXAMINATION
Title: NOVEL DYES AND USE THEREOF IN IMAGING MEMBERS AND METHODS

Bib Data report

Application Title: NOVEL DYES AND USE THEREOF IN IMAGING MEMBERS AND METHODS	
Application Num: 10788963 (in phx)	Filing Date: 02/27/2004
Effective Filing: 02/27/2004 (<u>Location History</u>) (<u>Foreign/Continuity Data</u>)	
Status: 30/DOCKETED NEW CASE - READY FOR EXAMINATION Status Date: 09/25/2004	
Patent Number: Not Issued Issue Date: N/A Date of Abandonment: N/A	
Confirmation Number: 6695	PALM Location:
Examiner: 75663 WALKER, AMANDA (<u>Assignment Data</u>) Group Art Unit: 1752 Class/Subclass: 430/357.000	
State or Country: MASSACHUSETTS Sheets/Drawing: 0 Total Claims: 11 Independent Claims: 1	
Inventors:	
Last name, First name:	Country or State:
CHEON, KAP-SOO	SHREWSBURY MASSACHUSETTS
FILOSA, MICHAEL	MEDFIELD MASSACHUSETTS
MARSHALL, JOHN	LEXINGTON MASSACHUSETTS
Attorneys: <u>ALL</u> Attorney Docket No: 8587-AFP/GDM	

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STRUCTURE FILE UPDATES: 9 DEC 2004 HIGHEST RN 796026-09-0
DICTIONARY FILE UPDATES: 9 DEC 2004 HIGHEST RN 796026-09-0

TSCA INFORMATION NOW CURRENT THROUGH MAY 21, 2004

Please note that search-term pricing does apply when
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Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more
information enter HELP PROP at an arrow prompt in the file or refer
to the file summary sheet on the web at:
<http://www.cas.org/ONLINE/DBSS/registryss.html>

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(FILE 'HOME' ENTERED AT 09:40:11 ON 10 DEC 2004)

FILE 'LREGISTRY' ENTERED AT 09:40:17 ON 10 DEC 2004

L1 STR
L2 STR L1
L3 STR L1
L4 STR L2

FILE 'REGISTRY' ENTERED AT 10:54:42 ON 10 DEC 2004

L5 50 S L4
L6 STR L2
L7 50 S L6
L8 8631 S L6 FULL
SAV L8 WAL566/A

FILE 'HCAPLUS' ENTERED AT 11:37:04 ON 10 DEC 2004

L9 1195 S CHEON ?/AU
L10 23478 S CHU ?/AU
L11 128 S FILOSA ?/AU
L12 413 S TELFER ?/AU
L13 0 S L9 AND L10 AND L11 AND L12

FILE 'HCAPLUS' ENTERED AT 11:57:48 ON 10 DEC 2004

L14 57 S CHEON K?/AU
L15 1169 S CHU P?/AU
L16 128 S FILOSA ?/AU
L17 413 S TELFER ?/AU
S L1 AND L2 AND L3 AND L4

FILE 'HCAPLUS' ENTERED AT 11:59:34 ON 10 DEC 2004

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L19 0 S L14 AND L15
L20 1 S L14 AND L16
L21 0 S L14 AND L17
L22 0 S L15 AND L16
L23 3 S L15 AND L17
L24 3 S L16 AND L17
L25 7 S L18-L24
SEL L25-1-7 RN

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L29 12534 S 7938.12.8/RID
L30 36 S L29 AND L26
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L33 1 S L32 SSS SAM SUB=L8
L34 2 S L32 SSS FUL SUB=L8

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L35 1 S L34

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L37 6577 S L3 SSS FUL SUB=L8
SAV L37 WAL566B/A
L38 9 S L30 AND L37

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L40 0 S L38

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E OPTICAL IMAGING DEVICES/CV
L42 31947 S E3

L43 147550 S IMAGING#
L44 352089 S DYE?
L45 20476 S L37
L46 41 S L45 AND L42
L47 654 S L45 AND L43
L48 6853 S L45 AND L44
L49 41 S L46 AND L47
L50 27 S L46 AND L48
L51 240 S L47 AND L48
L52 27 S L49 AND L51

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L53 27 S L51 AND L52

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L57 1 S L54 SSS FUL SUB=L37
SAV L57 WAL566C/A

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L59 STR L3

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L68 37 S L65 SSS FUL SUB=L37
SAV L68 WAL566D/A

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L69 34 S L68

FILE 'REGISTRY' ENTERED AT 14:17:20 ON 10 DEC 2004
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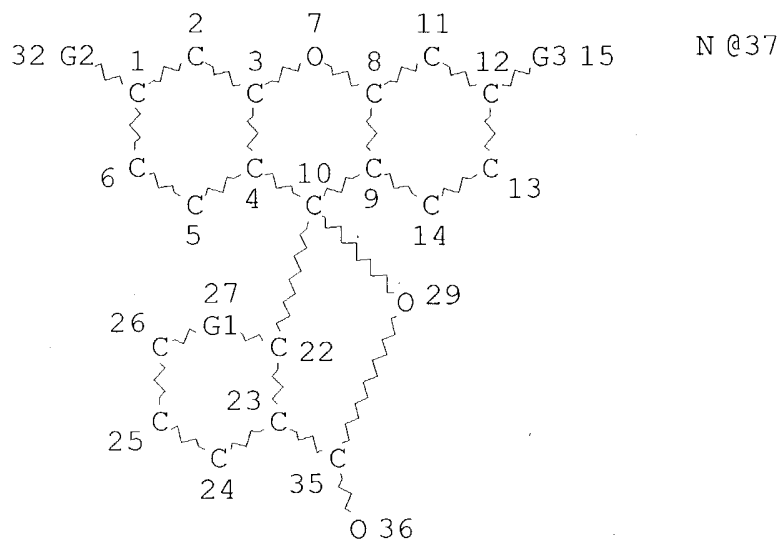
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L73 1 S L72 AND L42
L74 5 S L72 AND L43
L75 34 S L72 AND L44
L76 1 S L75 AND (L50 OR L52 OR L53)
L77 875772 S OPTIC?
L78 14 S L72 AND L77
L79 10 S L78 AND (L42 OR L43 OR L44)
L80 18 S L41 OR L58 OR L73 OR L74 OR L76 OR L79 OR L78
L81 60 S (L50 OR L52 OR L53 OR L69)
L82 59 S (L50 OR L52 OR L53 OR L69) NOT L80
L83 21 S L75 NOT (L80 OR L82)

FILE 'REGISTRY' ENTERED AT 14:40:40 ON 10 DEC 2004

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L6 STR



VAR G1=C/N

VAR G2=N/O

VAR G3=O/37

NODE ATTRIBUTES:

NSPEC IS RC AT 37

DEFAULT MLEVEL IS ATOM

DEFAULT ECLEVEL IS LIMITED

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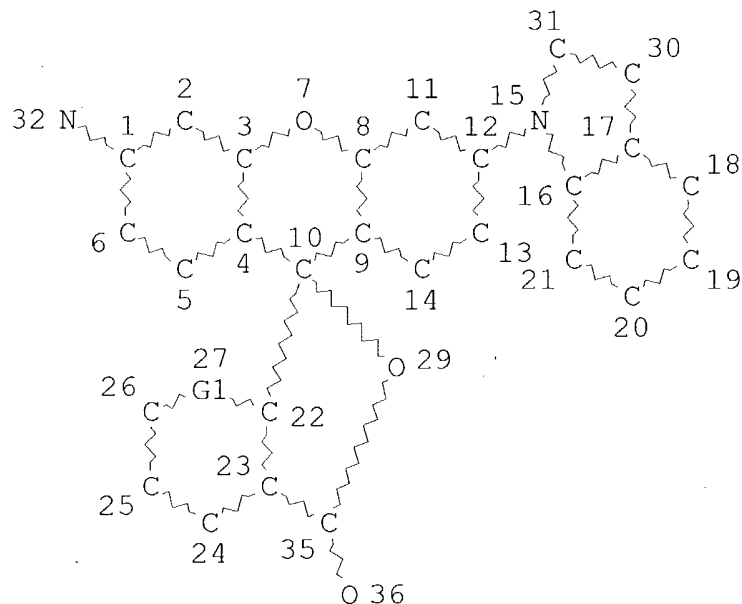
RING(S) ARE ISOLATED OR EMBEDDED

NUMBER OF NODES IS 26

STEREO ATTRIBUTES: NONE

L8 8631 SEA FILE=REGISTRY SSS FUL L6

L32 STR



VAR G1=C/N

NODE ATTRIBUTES:

DEFAULT MLEVEL IS ATOM

DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED

NUMBER OF NODES IS 33

STEREO ATTRIBUTES: NONE

L34 2 SEA FILE=REGISTRY SUB=L8 SSS FUL L32

100.0% PROCESSED 75 ITERATIONS

2 ANSWERS

SEARCH TIME: 00.00.01

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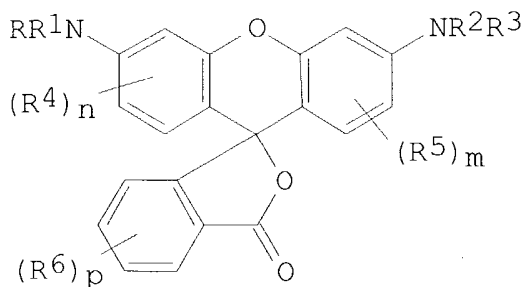
FILE COVERS 1907 - 10 Dec 2004 VOL 141 ISS 25
FILE LAST UPDATED: 9 Dec 2004 (20041209/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

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L35 ANSWER 1 OF 1 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1982:26837 HCAPLUS
DOCUMENT NUMBER: 96:26837
TITLE: Color formers for image recording materials
PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 15 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 56077189	A2	19810625	JP 1979-155117	19791130
JP 01007596	B4	19890209		
GB 2066835	A	19810715	GB 1980-38350	19801128
GB 2066835	B2	19841031		
DE 3045022	A1	19810827	DE 1980-3045022	19801128
DE 3045022	C2	19900809		
ES 497304	A1	19811201	ES 1980-497304	19801128
US 4390616	A	19830628	US 1980-212010	19801201
ES 505548	A1	19820601	ES 1981-505548	19810916
US 4436920	A	19840313	US 1982-357105	19820311
PRIORITY APPLN. INFO.:			JP 1979-155117	
19791130			US 1980-212010	
19801201				



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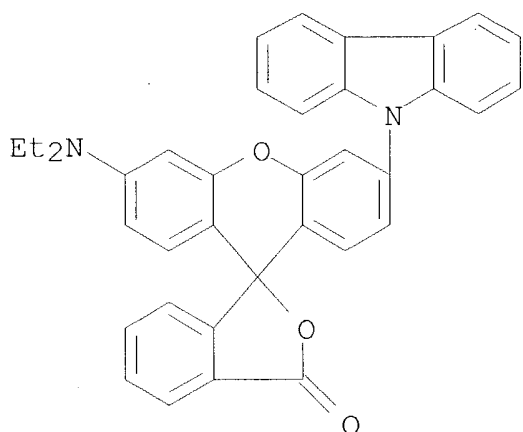
and the solution was microencapsulated. The pressure-sensitive copying paper obtained by using the microcapsule dispersion showed good coloration characteristics and gave a copy having excellent light fastness and heat resistance.

RL: USES (Uses)

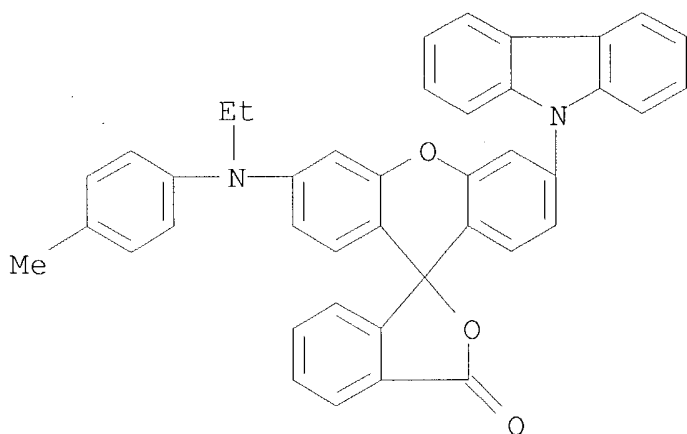
(dye precursor, for image recording paper)

CN Spiro[isobenzofuran-1 (3H), 9'-[9H]xanthen]-3-one, 3'-(9H-carbazol-9-yl)-6'-

(diethylamino)- (9CI) (CA INDEX NAME)



RN 80323-13-3 HCAPLUS
CN Spiro[isobenzofuran-1(3H), 9'-(9H)xanthen]-3-one,
3'-(9H-carbazol-9-yl)-6'-
[ethyl(4-methylphenyl)amino]- (9CI) (CA INDEX NAME)



IC B41M005-12; C09B011-28
CC 74-3 (Radiation Chemistry, Photochemistry, and Photographic and Other
Reprographic Processes)
IT 80323-05-3 80323-06-4 80323-07-5 80323-08-6 80323-09-7
80323-10-0 80323-11-1 80323-12-2 80323-13-3
80323-14-4
RL: USES (Uses)
(dye precursor, for image recording paper)

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